

Notice of Allowability

Application No.

10/790,826

Examiner

Shawn Riley

Applicant(s)

TAMURA, YOSHIMOTO

Art Unit

2838

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3 March 2004 filing.
2. ☒ The allowed claim(s) is/are 1-7.
3. ☒ The drawings filed on 03 March 2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).


* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date mar 2004
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.


Shawn Riley
Primary Examiner

DETAILED ACTION**Reasons for Allowance**

1. The following is an examiner's statement of reasons for allowance: No prior art uncovered anticipates or renders obvious applicant(s) claimed coils are arranged in directions of canceling DC fluxes generated by windings of the coils, and wherein a primary circuit is formed on the primary side of the insulating transformer, the primary circuit being configured so that a series circuit of the input choke coil and the first switching device is connected across terminals of the DC voltage source, a series circuit of a first capacitor and the primary coil is connected across the terminals of the first switching device, and a series circuit of the second switching device and a second capacitor is connected across terminals of the first switching device, and a secondary circuit is formed on the secondary side of the insulating transformer, the secondary circuit including a first rectifying device connected to a first secondary coil divided by the center tap in the secondary coil, a second rectifying device connected to a second secondary coil, the output choke coil fed with current having been rectified by the first and second rectifying devices, and an output smoothing capacitor connected to the output choke coil.

Further, no prior art uncovered anticipates or renders obvious applicant(s) claimed wherein a primary circuit is formed on the primary side of the insulating transformer, the primary circuit being configured so that a series circuit of the input choke coil and the first switching device is connected across terminals of the DC voltage source, a series circuit of a first capacitor and the primary coil is connected across terminals of the first switching device, and a series circuit of the second switching device and a second capacitor is connected in parallel with the input choke coil

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between a positive terminal of the DC voltage source and a negative source of the input choke coil, and a secondary circuit is formed on the secondary side of the insulating transformer, the secondary circuit including a first rectifying device connected to a first secondary coil divided by the center tap in the secondary coil, a second rectifying device connected to a second secondary coil, the output choke coil fed with current having been rectified by the first and second rectifying devices, and an output smoothing capacitor connected to the output choke coil.

Further, no prior art uncovered anticipates or renders obvious applicant(s) claimed and the second secondary coil, and the output choke coil are wound around a common core, and the coils are arranged in directions of canceling DC fluxes generated by coil windings, and wherein a primary circuit is formed on the primary side of the insulating transformer, the primary circuit being configured so that a series circuit of the input choke coil and the first switching device is connected across terminals of the DC voltage source, a series circuit of a first capacitor and the primary coil is connected across terminals of the first switching device, and a series circuit of the second switching device and a second capacitor is connected across the terminals of the switching device, and a secondary circuit is formed on the secondary side of the insulating transformer, the secondary circuit including a first rectifying device connected to the first secondary coil, a second rectifying device connected to the second secondary coil, the output choke coil fed with current having been rectified by the first and second rectifying devices, and an output smoothing capacitor connected to the output choke coil.

Further, no prior art uncovered anticipates or renders obvious applicant(s) claimed and the coils are arranged in directions of canceling DC fluxes generated by windings of the coils, and

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wherein a primary circuit is formed on the primary side of the insulating transformer, the primary circuit being configured so that a series circuit of the input choke coil and the first switching device is connected across terminals of the DC voltage source, a series circuit of a first capacitor and the primary coil is connected across terminals of the first switching device, and a series circuit of the second switching device and a second capacitor is connected in parallel with the input choke coil between a positive terminal of the DC voltage source and a negative source of the input choke coil, and a secondary circuit is formed on the secondary side of the insulating transformer, the secondary circuit including a first rectifying device connected to the first secondary coil, a second rectifying device connected to a second secondary coil, the output choke coil fed with current having been rectified by the first and second rectifying devices, and an output smoothing capacitor connected to the output choke coil.

2.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Allowable Subject Matter

1. Claims 1-7 are allowable over the prior art of record.

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Conclusion

Any inquiry from other than the applicant/attorney of record concerning this communication or earlier communications from the Examiner should be directed to the Patent Electronic Business Center (EBC) at 1.866.217.9197. Any inquiry from a member of the press concerning this communication or earlier communications from the Examiner or the application should be directed to the Office of Public Affairs at 703.305.8341. Any inquiry from the applicant or an attorney of record concerning this communication or earlier communications from the Examiner should be directed to Examiner Riley whose telephone number is 571.272.2083. The Examiner can normally be reached Monday through Thursday from 7:30-6:00 p.m. Eastern Standard Time. The Examiner's Supervisor is Mike Sherry who can be reached at 571.272.2084. Any inquiry about a case's location, retrieval of a case, or receipt of an amendment into a case or information regarding sent correspondence to a case **should be directed to 2800's Customer Service Center** at 571.272.2815. Any papers to be sent by fax MUST BE sent to fax number 703.872.9306. Any inquiry of a general nature of this application should be **directed to the Group receptionist** whose telephone number is 571.272.2800. Status information of cases may be found at <http://pair-direct.uspto.gov> wherein unpublished application information is found through private PAIR and published application information is found through public PAIR. Further help on using the PAIR system is available at 1.866.217.9197 (Electronic Business Center).

May 05



Shawn Riley
Primary Examiner